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**From:** Peters, Emily (MPCA)  
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**Subject:** new dose responses and ANOVA update  
hydroponic\_individualtests\_weightchange\_20140218.docx

Ed and Phil,

Attached are new dose response curves for the hydroponic data, based on Russ's suggestions from this morning. The curves are fit using weight change (mg/day) as the dependent variable. EC20 and EC50 are calculated based on positive weight change only. EC20 and EC50 estimates are lower than those previously calculated using growth rate constant as the response variable, as Russ predicted.

I sent some ANOVA and ANCOVA analyses to Russ to review. I'm waiting for his comments. My pooled ANOVA analysis shows similar results to those that Russ described in his email over the weekend. Treatment 2 is significantly different from the Control, when data from all 3 tests are included in the ANOVA. Separate ANOVAs for each test (Range Finder, D1, D2) disagree with this statement. I'll follow up as soon as I know more...maybe ANCOVA will prove to be more useful.

-Emily

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